DOCUMENT RESUME

ED 045 239 RC 004 873

AUTHOR	Stockwell, Edward G.
TITLE	Rural Depopulation in the Northeast.
INSTITUTION	Connecticut Univ., Storrs.
SPONS AGENCY	Department of Agriculture, Washington, D.C.
REPORT NO	RR-31
PUB DATE	Oct 69
NOTE	6p.
EDRS PRICE	EDRS Price MF-$0.25 HC-$0.40
DESCRIPTORS	Age Differences, *Demography, *Migration, *Population Trends, *Rural Population, *Socioeconomic Status, Urbanization
IDENTIFIERS	*Northeast

ABSTRACT

Regional Research Project NE-47 is producing a series of studies dealing with the determinants and consequences of various population trends and changes in Connecticut and the Northeast. One of the overall objectives of this project was specified as the development, at the regional level, of a set of economic, social, and demographic data to provide a background against which individual community studies could be analyzed and interpreted. The study described in this report was undertaken in order to examine the social and economic consequences of population decline within the Northeast. It was hypothesized that among rural areas losing population the socioeconomic characteristics of the population would vary inversely with the extent to which out-migration was balanced by an excessive of births over deaths. Seventy-six rural counties were divided into 4 groups on the basis of their ratios of total population loss to migration loss. The 4 groups were then compared in terms of their average standing with respect to several demographic and socioeconomic variables. Results indicated (1) that there is little, if any, systematic variation among the county groupings with respect to the demographic characteristics of their population with the exception of age, and (2) that the socioeconomic characteristics of the population vary inversely with the extent to which out-migration is balanced by natural increase. (JH)

RESEARCH REPORT 31 OCT. 1969

ED0 45239

RECEIVED
DEC 10 1970
NMSU
E.R.I.C.

RURAL DEPOPULATION IN THE NORTHEAST

By Edward G. Stockwell

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

RC 004873

STORRS AGRICULTURAL EXPERIMENT STATION
COLLEGE OF AGRICULTURE AND NATURAL RESOURCES
THE UNIVERSITY OF CONNECTICUT

ED0 45239

RURAL DEPOPULATION IN THE NORTHEAST[1]

RECEIVED
DEC 10 1970
NMSU
E.R.I.C.

by Edward G. Stockwell
Professor of Rural Sociology[2]

INTRODUCTION

This report is one of a continuing series of studies dealing with the determinants and consequences of various population trends and changes in Connecticut and the Northeast Region.[3] This particular report was prepared as part of Connecticut's contribution to Regional Research Project NE-47, "Social and Economic Consequences of Changes in Employment Upon Selected Communities in the Northeast." One of the overall objectives of this project was specified as the development, at the regional level, of a set of economic, social and demographic data to provide a background against which the individual community studies could be analyzed and interpreted. The study described in this report was undertaken in order to examine the social and economic consequences of population decline within the Northeast.

Although it is *population increase* that has received by far the greatest attention of scholars interested in the socioeconomic determinants and consequences of population change, there has emerged in the last few years a growing interest in the phenomenon of *population decline*. More specifically, the recent emergence and fairly rapid spread of the occurrence of natural

1. *Received for publication March 3, 1969*

2. The author wishes to acknowledge the assistance of Mrs. Mary Ellen Lazakis, Graduate Research Assistant in the Department of Rural Sociology, who compiled the basic data on which this report was based.

3. A list of other publications in this series is presented at the end of this report.

decrease (or "biological dissolution") in a number of rural areas in the United States has reawakened a long-standing interest in the problems and consequences of rural depopulation.[4]

The extent to which population decline (especially rural population decline) is emerging as a problem can be illustrated by the following figures. In the United States between 1950 and 1960 there were 1,532 out of 3,081 counties (49.7 percent) that experienced a population loss; and 1,426 of these declining counties (93.1 percent) were classified as predominantly rural.[5] In the Northeast Land Grand College Region,[6] 91 out of 299 counties (30.4 percent) experienced a population loss between 1950 and 1960; and 76 of these declining counties (83.5 percent) were classified as rural or non-metropolitan.

Since this phenomenon of rural depopulation is likely to become even more widespread in our rapidly emerging megalopolitan society, this is a topic that will probably continue to receive attention in the years to come. In anticipation of this continued interest, the present short paper offers a simple classification scheme that will permit a more orderly approach to the study of the socioeconomic and demographic consequences of population decline.

METHODOLOGY

This report presents a suggested procedure for grouping areas that are losing population into relatively homogeneous types based on the *pattern of population decline.* The general working hypothesis that motivated the present undertaking was a belief that the precise impact (consequences) of population decline would differ depending on the processes through which depopulation was being achieved. More specifically, it was hypothesized that among rural areas losing population the socioeconomic characteristics of the population would vary inversely with the extent to which out-migration was balanced by an excess of births over deaths.

To test this hypothesis, the 76 non-metropolitan counties in the Northeast Land Grant College Region that had experienced a population loss

4. One of the earliest discussions of this topic was the 1939 paper by Harold F. Dorn, "The Natural Decrease of Population in Certain American Communities," *Journal of the American Statistical Association,* 34:205 (1939). For more recent discussions see the following: Calvin L. Beale, "Rural Depopulation in the United States: Some Demographic Consequences of Agricultural Adjustments," *Demography,* 1:1 (1964); Everett S. Lee and Jane Mervine, "Our Disappearing Rural Population: What Are The Consequences?", *Vital Issues,* 17:8 (April, 1968); and Calvin L. Beale, "Natural Decrease of Population: The Current and Prospective Status of an Emergent American Phenomenon" (Paper presented before the Population Association of America, Boston, Massachusetts, April 19, 1968).

5. Calvin L. Beale, "Rural Depopulation in the United States," *op. cit.*

6. The 12 states included in this region are Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont and West Virginia.

between 1950 and 1960 were divided into four groups on the basis of the *ratio of total population loss to migration loss.*[7] It should be apparent that the use of such a ratio makes it possible to study the influence of the *pattern* of the population changes taking place without regard to either the absolute or relative magnitude of the changes. To illustrate, consider the three hypothetical counties described in Table 1. County A and County B both have the same *absolute* loss but a markedly different *relative* loss, whereas Counties A and C have the same *relative* loss but a widely different *absolute* loss. All three counties, however, would have the same ratio of total or net loss to migration loss – a ratio of 1 to 2 or .50.

Table 1. – Hypothetical illustration of the population decline typology.

	Population 1950	1950-60 Changes				Ratio of net loss to migration loss
		Migration	Natural Increase	Net Change		
				Number (ABSOLUTE)	Percent (RELATIVE)	
County A	100	-50	+25	-25	-.25%	1:2(.50)
County B	5,000	-50	+25	-25	-.005%	1:2(.50)
County C	10,000	-5,000	+2,500	-2,500	-.25%	1:2(.50)

With regard to interpretation, it may be noted that a ratio of total population loss to migration loss in excess of 1.0 would indicate the existence of natural decrease as well as out-migration. The smaller the ratio, the closer migration loss come to being balanced by an excess of births over deaths, *and*, it was expected, the higher would be socioeconomic status of the population.

Once these ratios were computed, the 76 study counties were divided into four broad groups as follows:

Ratio of total loss to migration loss	Number of counties
Less than .20	14
.20 to .39	20
.40 to .59	29
.60 and over	13

7. Statistics on population growth and the components of population change on which this analysis was based were taken from U.S. Bureau of the Census, "Components of Population Change, 1950 to 1960, for Counties, Standard Metropolitan Statistical Areas, State Economic Areas, and Economic Subregions," *Current Population Reports,* P-25, No. 7 (November, 1962).

These four groups were then compared in terms of their average standing with respect to several demographic and socioeconomic variables.[8] The results of these comparisons are presented in Tables 2 and 3.

RESULTS

(1) *Demographic Structure:* Table 2 depicts nine selected demographic characteristics of declining non-metropolitan counties in the Northeast grouped according to the pattern of population decline. These data may be summarized briefly as follows:

(a) There is a tendency for the *age composition* of the population to vary inversely with the degree to which migration loss is offset by natural increase: the less the compensation, the older the population. To illustrate, counties where the ratio of total loss to migration loss is highest (.60 or more) have the smallest percentage under 18, the largest percentage over 65, and the smallest fertility ratio (i.e., the fewest children relative to the size of the adult population). In addition, there is an obvious trend for the proportion of families with children under 6 to decrease as the magnitude of the total loss: migration loss ratio increases.

(b) There is little or no discernible association between the pattern of population loss and the average number of people per household, the percentage living in group quarters, and the percentage of the population that is classified as rural farm. The latter variable, however (percent rural farm) is notably higher in the group of counties having the highest loss ratio.

(c) The mobility data are contradictory. On the one hand, mobility would be highest in those counties having the highest total loss: migration loss ratio (i.e., they have the largest percentage that had moved since 1958). On the other hand, these counties would appear to be most stable (i.e., they also have the largest proportion of persons living in the state of their birth). These conflicting tendencies clearly do not permit any valid generalizations concerning the association between internal mobility and the pattern of population loss in declining rural areas in the Northeast Region.

To summarize briefly: An examination of data presented in Table 2 suggests that, with the exception of age, there is very little if any systematic variation among the different county groupings with respect to the demographic characteristics of their population.

8. The data for this part of the analysis were taken from U.S. Bureau of the Census, *U.S. Census of Population: 1960,* Final Reports PC(1), Parts B and C, Tables 13, 35 and 36 of individual state reports.

Table 2. — Selected demographic characteristics of declining non-metropolitan counties grouped according to the differential impact of migration on population decline: Northeast Region, 1960.[a]

Selected demographic characteristics	All counties	Ratio of total loss to migration loss[b] Less than .20	.20 to .39	.40 to .59	.60 and over
Number of counties	76	14	20	29	13
Percent under 18	36.3	35.7	35.9	37.3	35.3
Percent 65+	11.2	11.8	10.1	10.8	13.1
Fertility ratio[c]	473	493	491	464	443
Percent of families with children under 6	27.0	28.7	28.9	26.5	23.7
Population per household	3.47	3.34	3.52	3.53	3.41
Percent group quarters	1.8	2.8	1.3	1.7	2.0
Percent rural farm	13.9	13.5	14.7	11.2	19.3
Percent living in state of birth	87.8	86.5	86.6	87.8	91.0
Percent moved since 1958	18.8	18.1	19.0	18.6	20.0

a Values shown in table are arithmetic means for all counties in each group.

b A ratio greater than 1.00 would indicate a *natural decrease* as well as migration loss. The smaller the ratio, the more migration loss is compensated by an excess of births over deaths.

c Number of children under 5 per 1,000 women at ages 15-44 years.

(2) *Socioeconomic Structure:* Table 3 presents data on 12 socioeconomic characteristics for the four groups of declining non-metropolitan counties in the Northeast Region. In contrast to the demographic characteristics, these data are consistent in revealing the existence of a progressive deterioration in socioeconomic status as the ratio of total loss to migration loss increases. There are only two deviations from consistency with regard to this general relationship (the percent of males employed at ages 18-24 and 65 and over); and even these deviations are very slight.

Table 3. — Selected economic characteristics of declining non-metropolitan counties grouped according to the differential impact of migration on population decline: Northeast Region, 1960.[a]

Selected economic characteristics	All Counties	Ratio of total loss to migration loss[b] Less than .20	.20 to .39	.40 to .59	.60 and over
Number of counties	76	14	20	29	13
Percent 14-17 enrolled	84.2	88.7	84.1	83.3	81.1
Median education	9.2	10.1	9.3	8.9	8.6
Nonworker ratio[c]	2.14	1.74	2.06	2.31	2.32
Percent of female in labor force	25.1	30.7	26.5	23.0	21.4
Percent of male 18-24 in labor force	69.8	75.5	74.2	65.1	66.8
Percent of male 65+ in labor force	25.0	28.8	27.0	22.2	24.3
Percent unemployed	8.9	7.4	7.6	9.9	10.2
Percent employed in manufacturing	23.1	27.2	25.2	21.7	18.5
Percent employed in white collar occupations	30.7	33.0	30.5	30.4	29.4
Percent worked 50-52 weeks	48.0	53.2	50.6	46.1	42.6
Percent of families with income under $3,000	36.9	24.9	34.9	39.1	47.6
Percent of families with income of $10,000 or more	5.7	7.9	5.9	5.4	3.6

a Values shown in table are arithmetic means for all counties in each group.

b A ratio greater than 1.00 would indicate a *natural decrease* as well as migration loss. The smaller the ratio, the more migration loss is compensated by an excess of births over deaths.

c Ratio of persons not in labor force (including children under 14) to labor force.

On the basis of these observations it would appear justifiable to accept the basic hypothesis as far as socioeconomic status is concerned. Thus, it can be concluded that the socioeconomic characteristics of the population in

declining rural areas does indeed vary inversely with the extent to which out-migration is balanced by natural increase.

DISCUSSION

Historically the movement of people from farms to cities has been regarded as a necessary accompaniment of the continued economic growth and development of our American society. This is because this rural-to-urban migration stream has performed the dual function of (1) removing excess population from the land as agricultural technology improved, and (2) supplying the workers needed for expanding urban industries. Beyond these economic advantages, rural-to-urban migration has played a key role in promoting greater social and cultural homogeneity and greater harmony in American society. Today rural people read city newspapers and magazines, they patronize city businesses, go to city theatres, send their children to city schools, etc. In the words of one rural sociologist, this increasing interaction has been a major factor in "breaking down provincialism in both country and city and in lessening the importance of the barriers between city and country which sometimes result in antagonism and conflict."[9] In this respect, then, one can regard the rural-to-urban population interchange as one means of creating and promoting national unity.

The various advantages notwithstanding, there have always been some who had strong misgivings about the growing urban concentration and who especially lamented what they referred to as the "flight from the land." Such persons have generally argued that it is the small, relatively homogeneous rural areas that produce all that is good in human society (strong family ties, high moral character, firm religious convictions, industrious work habits, integrity, thrift, etc.). These critics argue that the influence of such basic values declines in large heterogeneous population groups such as one finds in cities; hence, they would cite city-ward migration as a major factor behind what they would regard as the moral decay of mid-twentieth century America.

Although there are many good reasons for challenging the contention that rural areas produce only "good things" and that the growth of cities is responsible for all that is "bad" in human social life, it is a fact that the growing concentration of the population in urban areas does create certain problems.[10] It is equally true, however, that this urbanization trend creates many problems for the rural areas from which city-ward migrations are drawn.

9. Lowry Nelson, *Rural Sociology* (New York: American Book Company, 1953), 143.

10. For a recent discussion of this issue in Connecticut, see Edward G. Stockwell, *Problems of Metropolitan Growth and Change in Connecticut,* Storrs AES Bulletin 408 (October, 1968).

Problems that urbanization has created for rural areas relate to changes in both the size and composition of the rural population. On the quantitative side is the simple fact that city-ward migration has reduced the absolute size of the rural population to a point that many areas are no longer able to support such basic community facilities and services as hospitals, police, and fire departments, shopping centers and specialty stores, public transportation systems, schools, doctors, dentists, etc. In other words, rural depopulation has been accompanied by a subsequent loss of those community services that many city dwellers take for granted but that cannot exist unless there is a relatively large base population to support them. The ultimate consequence of all this has been a serious deterioration in the quality of rural life in many parts of America.

The general problems relating to loss of population have frequently been made more serious by the selective nature of the rural-to-urban migration stream. Although there are exceptions, this stream has tended to be most selective of young people. This has been beneficial for cities in that urban industries have been provided with a steady influx of new recruits for the work force, but it has had a converse bad effect on rural areas by removing the most productive segment of the population. Many rural areas have found themselves populated by large proportions of older persons – or those most likely to need many of the health and welfare services that can no longer be supported by their smaller populations. The seriousness of this problem for rural areas becomes more apparent when it is realized that it is the rural community that bears the cost of rearing and educating these young people only to lose out on the benefits of their productive labors.

There is also a potential economic loss to rural areas in that children who move to the cities not only take away whatever benefits might be gained by their labors, but by being heirs to land they do not cultivate (as well as other personal property) they exert a further influence on drawing off rural wealth.

There is thus a great deal to be said in support of the position that rural population decline leads to economic decline. The data presented in this paper, however, would suggest that this generalization be qualified to note that *the magnitude of economic decline as a response to depopulation is at least in part a function of the nature of the interaction pattern among the three basic demographic processes of fertility, mortality and migration.*

CONCLUSION

The study described in this paper can certainly not be regarded as conclusive. For one reason, it has been limited to an examination of *rural* depopulation in only one geographic region of the country. Additional research is thus needed to see if similar patterns exist with regard to *urban* depopulation in the Northeast, *and* with regard to both urban and rural depopulation in other parts of the country (and even in other countries). Still another limitation of the present study that future investigators might want

to take into consideration is the failure to control for differences in the absolute magnitude of population decline. These limitations notwithstanding, the findings presented here clearly suggest the conclusion that an adequate understanding of the consequences of population decline will not be forthcoming by considering only the fact, amount and/or speed of population decline. Rather, it will require in addition a careful consideration of the demographic processes through which decline is effected.

RELATED REPORTS

Other reports published by the College of Agriculture Experiment Station dealing with the population trends and changes in Connecticut and the Northeast include:

Edward G. Stockwell, *Age Composition of the Northeast Region,* Storrs AES Progress Report 50 (November, 1962).

Edward G. Stockwell, *Illustrative Projections of the Population of the New England States, by Age and Sex, 1960 to 1980,* Storrs AES Progress Report 51 (February, 1963).

Edward G. Stockwell and Dorothy G. Ingalls, *Illustrative Projections of the Population of the Middle Atlantic States, by Age and Sex, 1960 to 1980,* Storrs AES Progress Report 53 (May, 1963).

Edward G. Stockwell, Dorothy G. Ingalls, and Helene P. Matterson, *Illustrative Projections of the South Atlantic States of the Northeast Region, 1960 to 1980,* Storrs AES, NE-31/WP (July, 1963).

Edward G. Stockwell, *A Socioeconomic Ranking of Counties in Connecticut and the Northeast Region,* Storrs AES Research Report 2 (January, 1965).

Edward G. Stockwell and Harold F. Goldsmith, *Population Mobility in Connecticut and the Northeast Region,* Storrs AES Research Report 11 (October, 1965).

Edward G. Stockwell and Harold F. Goldsmith, *Educational Characteristics of the Population of Connecticut and the Northeast Region,* Storrs AES Research Report 13 (June, 1966).

Edward G. Stockwell and Harold F. Goldsmith, *Labor Force Trends and Unemployment in Connecticut and the Northeast Region,* Storrs AES Research Report 19 (Dec., 1966).

Edward G. Stockwell and Harold F. Goldsmith, *Age-Sex Composition of the Northeast Region: 1950 to 1960,* Storrs AES Bulletin 396 (December, 1966).

Edward G. Stockwell and Harold F. Goldsmith, *Occupation of Workers in Connecticut and the Northeast Region,* Storrs AES Research Report 20 (January, 1967).

Edward G. Stockwell, *Income Characteristics of the Population in Connecticut and the Northeast Region,* Storrs AES Research Report 24 (September, 1967).